

RECENT LITERATURE.

Brewster's 'The Birds of the Cambridge Region of Massachusetts.'¹
 — Mr. Brewster's monograph of 'The Birds of the Cambridge Region' is a quarto volume of 426 pages, and forms No. IV of the 'Memoirs of the Nuttall Ornithological Club.' In thoroughness of research and explicitness of detail it fully meets the high standard naturally anticipated for such a work under such authorship and auspices. The 'Cambridge Region,' as here defined, is subtriangular in outline, with a width near its southern boundary of about 12 miles, and a north-south extension, near its western border, of about 14 miles; the hypotenuse of the triangle has an approximate northwest-southeast trend of about 18 miles. It includes "the entire cities or towns of Cambridge, Watertown, Belmont, . . . Arlington, Lexington, and practically the whole of Waltham." The boundaries are thus partly natural — being Charles River on the south, and Stony Brook and Hobbs Brook on the southwest and west — and partly artificial. As explained by the author: "This in effect has been to treat of that territory (and no other) over which ornithologists and collectors, living in or very near Cambridge, have been accustomed to roam during excursions not exceeding a day in duration, and made directly from their homes. It must be confessed that this arrangement was originally dictated quite as much by sentiment as by practical or scientific considerations; — nevertheless it has proved not unsatisfactory on the whole, despite the fact that it has led to some perplexities, and perhaps inconsistencies also."

This limited area is as historic, ornithologically considered, as any locality in America, possibly excepting Philadelphia and its immediate environs. The seventeenth century records of Wood, Morton, and Josselyn have an important significance as indicating the general ornithological conditions obtaining at that early date in portions of Massachusetts immediately adjoining the 'Cambridge Region.' It was in Cambridge that Nuttall wrote his 'Manual,' where for about ten years (1823-1832) he was curator of the Botanic Garden; it was evidently here also that he gathered much of the original matter contained in the 'Manual.' Later (1832-1840) Cambridge was the scene of much careful field work by the three Cabot brothers, and Henry Bryant. "Between 1842 and 1860 they [the birds of Cambridge] also received more or less attention from James Russell Lowell, Thomas M. Brewer, Wilson Flagg, and various successive members of the Harvard Natural History Society, while from 1861 or

¹ Memoirs of the Nuttall Ornithological Club.—No. IV. — | The Birds | of the Cambridge Region | of Massachusetts. | By William Brewster.—| With four Plates and three Maps.—| Cambridge, Mass. Published by the Club, | July, 1906.—4to, pp. 1-426, pll. i-vii.

1862 to the present day they have been constantly under the observation of an ever increasing number of ornithologists. Thus," continues the author, "we have knowledge of them extending back over a practically unbroken period of more than seventy years. This, although by no means complete at all points, is sufficient to enable us to trace some of the more important and interesting changes in the local distribution and abundance of many of the species — especially the larger ones — which have taken place during the period just indicated."

For a region so well known for so long a time, and so exhaustively studied by so many observers for the last twenty-five years, it seems a little singular that this should prove to be the first special publication on the birds of Cambridge and its immediate vicinity; the many previously published notes and records relating to it being widely scattered, and having reference mainly to the rarer species. The present monograph is of course based primarily and chiefly upon Mr. Brewster's own observations, covering a period of some forty years; but use has been made of all the hitherto published records; of the unpublished minutes of the Nuttall Ornithological Club, extending back to 1873; and of the personal field notes of a large number of the members of the Club, and of other ornithological friends of the author, which have been placed at his disposal, and which are of course duly accredited in the work.

The work opens without a formal 'table of contents,' — a rather inconvenient omission, and about the only point open to criticism in its otherwise admirable make-up. A 'Preface' of four pages (pp. 2-6) explains the basis and plan of the work, and contains the author's acknowledgments of indebtedness for assistance. An 'Introduction' of nearly 80 pages (pp. 7-84) is followed by the 'Annotated List' (pp. 85-398), the 'Explanation of Plates' (p. 598), and the 'Index' (pp. 401-426).

The Introduction, after a few pages of generalities, takes up the 'Cambridge Region' for treatment in detail by minor localities, beginning with the author's garden, comprising, prior to 1873, about six acres of smooth, gently sloping land, bordered by tall shade trees, and embracing orchards of apple, pear, and peach trees, shrubbery, and mowing fields; later it was reduced to two acres, the other four having been cut up into streets and house lots and built upon. The two periods are compared in respect to the bird population, the two lists of species given being notably in contrast. A list of the birds breeding in 'Norton's Woods,' near the present University Museum, from 1866 to 1874, is furnished by Dr. Walter Woodman, and another for Cambridgeport, in the "late sixties," is contributed by Mr. Henry W. Henshaw. The Charles River Marshes, Mount Auburn, — the Sweet Auburn of early days, and a favorite haunt of Nuttall, — and Fresh Pond, with its swamps and marshes, are all treated at length, with particular reference to their former characteristics and surroundings as contrasted with those of to-day, brought about by man's intervention — the filling in of much of the Back Bay basin, and the transformation of marshes, fields, and woodlands into crowded streets. These pertinent

and exceedingly interesting reminiscences will furnish a fund of grateful information to the local antiquarians of coming generations, and form also a most valuable record of the biologic changes in the region in question during the last half of the nineteenth century.

This historical résumé is followed by a nominal list of the species of the Cambridge Region, under vernacular names, divided into nine groups, according to "the character or status of their occurrence at the present time," as to whether permanent, summer, or winter residents, migrants, of casual occurrence, introduced, or extinct, etc., followed by several pages of comment. Then occur several pages devoted to 'Faunal Changes,' noting the species that have locally increased or decreased, and the known or apparent causes, as the case may be. Those whose local decrease is apparently due to persecution by the House Sparrows are the Least Flycatcher, Purple Finch, Song Sparrow, Indigo-bird, Tree Swallow, House Wren, and Bluebird. Following this are four pages on the 'Introduction of the House Sparrow,' giving a history of its introduction and its subsequent increase, and its influence upon the native bird fauna, including its dispossession methods in the case of the House Wren, Bluebird, and Tree and Eave Swallows, and its forays on the nests of vireos, warblers, and the smaller flycatchers.

Of special interest is the section devoted to 'Early Writers and Ornithologists' (pp. 69-84), including Thomas Morton, William Wood, and John Josselyn among the 'early writers,' and Nuttall, and Samuel and J. Elliot Cabot among the ornithologists. A portrait of Nuttall appropriately forms the frontispiece of the memoir, and nearly six pages are given to a sketch of his life and work. As a botanist Nuttall has been accorded high praise by subsequent botanical authorities, but Mr. Brewster calls his 'Manual' of ornithology, his only book on birds, largely a compilation. "Besides including borrowed statements and quotations for which he gave full credit, and much general matter which he made in a sense his own by re-writing it, he took long passages without acknowledgment and with but comparatively slight verbal changes from Wilson. . . .

"It is not less to be wondered at than regretted that Nuttall should have resorted so freely to this practice At the time of writing his 'Manual' he probably knew less about birds than is generally supposed Indeed it is chiefly to the literary excellence of his 'Manual' that this book owes its enduring popularity His accounts of his own experiences and observations are so very interesting and attractive that one is disappointed only because his book does not contain more of them. He was without question an exceptionally careful and accurate observer of everything which especially attracted his attention. His original descriptions of the habits and actions of birds are invariably good, and his renderings of their songs and call notes rank among the very best that have ever been published.

"It is probable that the period of Nuttall's greatest interest and activity in the field study of birds was that during which he was engaged in writing

the 'Manual,' and that his original contributions to this book are based very largely on observations made in the immediate neighborhood of Cambridge. Indeed the 'local coloring' of much of the matter is unmistakable. Such portions of it as clearly relate to his experience in the Cambridge Region afford testimony of the utmost credibility and value, but these, unfortunately, are too fragmentary and disconnected to give us any very clear idea of what the bird life of Cambridge was in Nuttall's time" . . . (pp. 79-81).

Mr. Brewster's criticisms of his method of borrowing from other authors without rendering due credit are illustrated by examples; but it is rather hard on Nuttall to hold him up for misdeeds that are only too common in other authors of even much more recent date without allusion to the fact that he is not the only sinner among writers of bird books.

The character of the 'Annotated List of Species' may best be stated in the words of the author, who says in his preface: "What I have had chiefly in mind has been to state as definitely as possible the times and seasons when each species has been noted, the numbers in which it has occurred, at long past as well as in very recent times, and the precise character and, in some instances also, situation of its local haunts." Hence "no attempt has been made to give full life histories of the birds," nor anything about their habits and songs except in some cases where mention of "these and kindred matters has seemed essential to a clearer understanding of the reasons governing the local occurrence or distribution of certain species, or desirable for the purpose of rendering commonplace or other tedious details more attractive." He says further: "I have included in their appropriate systematic order (1) birds which are known to have inhabited or visited the Cambridge Region in former times, but which no longer do so; (2) birds which have occurred very near but not actually within its boundaries; (3) birds which have been introduced by the direct agency of man; (4) birds which have been reported only on what appears to be insufficient or inconclusive evidence." The species mentioned that are considered as not "entitled to a present place in the natural fauna of the Region" are indicated by the use of smaller type for the text, which is also enclosed in brackets, and by omitting to number them as a part of the list. The native species of unquestioned present occurrences number 249; the additional species include 2 now extinct, 6 introduced by man's agency, and 19 considered as of doubtful record. The nomenclature, both technical and vernacular, is that of the A. O. U. Check-List, except that in some cases local English names are added, and in the case of the Arctic Horned Owl (pp. 203-205) where it is urged that the name that should be adopted for this subspecies is *subarcticus* Hoy.

In the preface (pp. 5, 6) is discussed the important question of what should be taken as satisfactory evidence for the occurrence of birds at localities where they do not properly belong. The author, very justly we think, does not admit that observation of the living bird is sufficient, and should not "be considered as establishing anything more than possi-

ble or probable occurrence — according to the weight and character of the evidence.” There may be exceptions to the rule, as in the case of species of easy recognition, like the Turkey Vulture, Swallow-tailed Kite, and the Cardinal, when reported by persons known to have had previous familiarity with the birds in life. “But on no authority, however good, should a mere field observation of any bird that is really difficult to identify, be taken as establishing an important primal record.” This is the basis of the author’s rulings in the present paper — a proper and the only safe basis in view of the present day methods of numerous amateur observers, who are too often burdening ornithological literature with ill-advised records.

Lack of space forbids detailed comment on the main text of the work, the ‘Annotated List of the Species,’ but its general character may be inferred from the excerpts already given from the author’s preface. For each species, following the technical name, is given usually, in a single line of small type, the general character of its occurrence, followed by three to five lines of small type respecting its ‘seasonal occurrence,’ in which dates of arrival and departure, and of nesting, are given, varying in character in accordance with the manner of occurrence of the species. Then follows, in larger type, a detailed statement, consisting of a few lines to several pages, as the case may require, in some instances including transcripts from the author’s notebooks running back to the later sixties. Many of these local bird histories are of exceeding interest, dealing as they do with the local increase or decrease of various species; while the five pages devoted to so common a bird as the Robin form a most charming bit of local bird lore.

The illustrations consist of three maps,—one of the ‘Cambridge Region’ of 1906, one of Cambridge at 1635, and one of Fresh Pond and its surroundings as they existed in 1886,—a portrait of Thomas Nuttall, a photogravure of a scene in the Maple Swamp (from a photograph taken by the author in June, 1900), a colored plate, by Fuertes, of *Acanthis brewsteri* (now thought to be probably a hybrid between *Acanthis lunaria* and *Spinus pinus*), and a half-tone reproduction of a drawing of the Cabot shooting stand at the outlet of Fresh Pond, in use from about 1832 to 1840.

While relating to only a small area, and prepared with strict reference to the local standpoint, ‘The Birds of the Cambridge Region’ cannot fail to become a classic in the annals of faunistic ornithology.—J. A. A.

Hellmayr ‘On the Birds of the Island of Trinidad’.¹—“The present paper is primarily based on the extensive collections made by Mr. André or his collectors in different parts of the island. Besides these series, which amount to upwards of 1500 skins, the Tring Museum received a number

¹On the Birds of the Island of Trinidad. By C. E. Hellmayr. *Novitates Zoologicae*, Vol. XIII, No. 1, February, 1906, pp. 1-60.